

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in this application.

1. (currently amended) A method of inhibiting activation by CD40 ligand of cells bearing CD40 on the cell surface, ~~other than B cells~~, comprising contacting the cells with an antibody or portion thereof comprising at least one variable region that specifically binds to the antigen to which monoclonal antibody 5c8 (ATCC Accession No. HB 10916) binds agent capable of inhibiting interaction between CD40 ligand and the cells, in an amount effective to inhibit activation of the cells, wherein said CD40-bearing cells are selected from fibroblasts, T cells, basophils, macrophages, Reed-Steinberg cells, keratinocytes and endothelial cells found in tissues selected from spleen, thyroid, muscle, kidney and lung.

Claims 2-6 (CANCELED)

7. The method of claim 6~~1~~, wherein the antibody is a monoclonal antibody..

8. (currently amended) The method of claim 7, wherein the monoclonal antibody is a chimeric antibody, humanized antibody, or a primatized antibody.

9. (currently amended) The method of claim 7, wherein the monoclonal antibody is monoclonal antibody 5c8 (ATCC Accession No. HB 10916)a humanized antibody.

Claims 10-12 (CANCELED)

13. (currently amended) The method of claim 12, wherein the portion of the antibody is selected from the group consisting of an Fab, F(ab')2 and comprises a Fab, or a single chain antibody that specifically binds to the antigen to which monoclonal antibody 5c8 (ATCC Accession No. HB 10916) specifically binds.

14. (currently withdrawn) The method of claim 5, wherein the protein comprises soluble extracellular region of CD40 ligand, or variants thereof including conservative substituents, or portion thereof; or soluble extracellular region of CD40, or variants thereof including, conservative substituents, or portion thereof.

15. (currently withdrawn) The method of claim 14, wherein the soluble extracellular region of CD40 ligand or CD40 is a monomer.

16. (currently withdrawn) The method of claim 14, wherein the soluble extracellular region of CD40 is an oligomer.

17. (currently withdrawn) The method of claim 14, wherein the protein comprising soluble extracellular region of CD40 or portion thereof further comprises an Fc region fused to the extracellular region of CD40 or portion thereof.

18. (currently withdrawn) The method of claim 17, wherein the Fc region is capable of binding to protein A or protein G.

19. (currently withdrawn) The method of claim 17, wherein the Fc region comprises IgG, IgA, IgM, IgD, or IgE, or subclasses thereof.

20. (currently withdrawn) The method of claim 19, wherein: the IgG is IgG.sub.1, IgG.sub.2, IgG.sub.3, or IgG.sub.4; or the IgA is IgA.sub.1 or IgA.sub.2.

Claims 21-23 (CANCELED)

24. (currently withdrawn) The method of claim 1, wherein the agent is a small molecule.

25. (currently withdrawn) The method of claim 1, wherein the agent specifically binds to CD40 on the cell surface.

26. (currently withdrawn) The method of claim 25, wherein the agent is a protein.

27. (currently withdrawn) The method of claim 26, wherein the protein is an antibody.

28. (currently withdrawn) The method of claim 27, wherein the antibody is a monoclonal antibody.

29. (currently withdrawn) The method of claim 28, wherein the monoclonal antibody is chimeric, humanized, or primatized.

30. (currently withdrawn) The method of claim 26, wherein the protein comprises the extracellular region of CD40 ligand.

31. (currently withdrawn) The method of claim 1, wherein the agent is nonprotein.

Claims 32-34 (CANCELED)

35. (currently amended) The method of claim 1, wherein the agent antibody is selected by a screening method, which comprises: isolating a sample of cells; culturing the sample under conditions permitting activation of CD40-bearing cells; contacting the sample with cells expressing a protein which is specifically recognized by monoclonal antibody 5c8 produced by the hybridoma having ATCC Accession No. HB 10916, or with a protein which is specifically recognized by monoclonal antibody 5c8 produced by the hybridoma having ATCC Accession No. HB 10916, effective to activate the CD40-bearing cells; contacting the sample with an amount of the agent antibody effective to inhibit activation of the CD40-bearing cells if

the agent antibody is capable of inhibiting activation of the CD40-bearing cells; and determining whether the cells expressing the protein which is specifically recognized by monoclonal antibody 5c8 produced by the hybridoma having ATCC Accession No. HB. 10916, or with the protein which is specifically recognized by monoclonal antibody 5c8 produced by the hybridoma having ATCC Accession No. HB 10916, activate the CD40-bearing cells in the presence of the agent antibody.

36. (currently amended) The method of claim 35, wherein the agent antibody is selected from a library of known agent antibodies.

37. (currently withdrawn) The method of claim 36, wherein the known agents are nonprotein agents.

Claims 38-53 (CANCELED)

54. (currently amended) The method of claim 38 1, wherein the subject is a mammal.

55. (Original) The method of claim 54, wherein the mammalian subject is a human.

56. (Original) The method of claim 54, wherein the mammalian subject is a rodent.

57. (currently withdrawn) The method of claim 38, wherein the protein comprises soluble extracellular region of CD40 ligand, or variants thereof including conservative substituents, or portion thereof; or soluble extracellular region of CD40, or variants thereof including conservative substituents, or portion thereof.

58. (currently withdrawn) The method of claim 57, wherein the soluble extracellular region of CD40 ligand or CD40 is a monomer.

59. (currently withdrawn) The method of claim 57, wherein the soluble extracellular region of CD40 is an oligomer.

60. (currently withdrawn) The method of claim 57, wherein the protein comprising soluble extracellular region of CD40 or portion thereof further comprises an Fc region-fused to the extracellular region of CD40 or portion thereof.

61. (currently withdrawn) The method of claim 60, wherein the Fc region is capable of binding to protein A or protein G.

62. (currently withdrawn) The method of claim 60, wherein the Fc region comprises IgG, IgA, IgM, IgD, or IgE, or subclasses thereof.

63. (currently withdrawn) The method of claim 62, wherein: the IgG is IgG.sub.1, IgG.sub.2, IgG.sub.3, or IgG.sub.4; or the IgA is IgA.sub.1 or IgA.sub.2.

64. (currently withdrawn) The method of claim 38, wherein the agent is a small molecule.

65. (currently withdrawn) The method of claim 38, wherein the agent specifically binds to CD40 on the cell surface.

66. (currently withdrawn) The method of claim 65, wherein the agent is a protein.

67. (currently withdrawn) The method of claim 66, wherein the protein is an antibody.

68. (currently withdrawn) The method of claim 67, wherein the antibody is a monoclonal antibody.

69. (currently withdrawn) The method of claim 68, wherein the monoclonal antibody is chimeric, humanized, or primatized.

70. (currently withdrawn) The method of claim 66, wherein the protein comprises the extracellular region of CD40 ligand.

71. (currently withdrawn) The method of claim 38, wherein the agent is nonprotein.

Claims 72-76 (CANCELED)

77. (currently withdrawn) The method of claim 76, wherein the known agents are nonprotein agents.

78. (currently amended) A method of inhibiting an inflammatory response a condition dependent on CD40 ligand-induced activation of CD40-bearing cells in a subject in need thereof, comprising the method of claim 38 administering to the subject an antibody or portion thereof comprising at least one variable region that specifically binds to the antigen to which monoclonal antibody 5c8 (ATCC Accession No. HB 10916) binds in an amount effective to inhibit activation of the CD40-bearing cells, wherein the CD40-bearing cells are selected from fibroblasts, T cells, basophils, macrophages, Reed-Steinberg cells, keratinocytes and endothelial cells found in tissues selected from spleen, thyroid, muscle, kidney and lung.

79. A The method of claim 78, wherein the treating a condition is dependent on CD40 ligand-induced activation of fibroblast cells in a the subject, comprising the method of claim 38.

80. (Original) The method of claim 79, wherein the fibroblasts are synovial membrane fibroblasts, dermal fibroblasts, pulmonary fibroblasts, or liver fibroblasts.

81. (currently withdrawn) The method of claim 79, wherein the condition is selected from the group consisting of arthritis, scleroderma, and fibrosis.

82. (currently withdrawn) The method of claim 81, wherein the arthritis is rheumatoid arthritis, non-rheumatoid inflammatory arthritis, arthritis associated with Lyme disease, or osteoarthritis.

83. (currently withdrawn) The method of claim 81, wherein the fibrosis is pulmonary fibrosis, hypersensitivity pulmonary fibrosis, or a pneumoconiosis.

84. (currently withdrawn) The method of claim 83, wherein the pulmonary fibrosis is pulmonary fibrosis secondary to adult respiratory distress syndrome, drug-induced pulmonary fibrosis, idiopathic pulmonary fibrosis, or hypersensitivity pneumonitis.

85. (currently withdrawn) The method of claim 83, wherein the pneumoconiosis is asbestosis, siliconosis, or Farmer's lung.

86. (currently withdrawn) The method of claim 81, wherein the fibrosis is a fibrotic disease of the liver or lung.

87. (currently withdrawn) The method of claim 86, wherein the fibrotic disease of the lung is caused by rheumatoid arthritis or scleroderma.

88. (currently withdrawn) The method of claim 86, wherein the fibrotic disease of the liver is selected from the group consisting of: Hepatitis-C; Hepatitis-B; cirrhosis; cirrhosis of the liver secondary to a toxic insult; cirrhosis of the liver secondary to drugs; cirrhosis of the

liver secondary to a viral infection; and cirrhosis of the liver secondary to an autoimmune disease.

89. (currently withdrawn) The method of claim 88, wherein the toxic insult is alcohol consumption.

90. (currently withdrawn) The method of claim 88, wherein the viral infection is Hepatitis B, Hepatitis C, or hepatitis non-B non-C.

91. (currently withdrawn) The method of claim 88, wherein the autoimmune disease is primary biliary cirrhosis, or Lupoid hepatitis.

92. (currently amended) A The method of claim 78, wherein the condition is dependent on CD40 ligand-induced activation of treating a condition dependent on CD40 ligand-induced activation of endothelial cells in a the subject, comprising the method of claim 38.

93. The method of claim 92, wherein the condition is ~~selected from the group consisting of atherosclerosis, reperfusion injury, allograft rejection, organ rejection, and a chronic inflammatory autoimmune disease~~ diseases.

94. (currently withdrawn) The method of claim 93, wherein the atherosclerosis is accelerated atherosclerosis associated with organ transplantation.

95. The method of claim 93, wherein the chronic inflammatory autoimmune disease is vasculitis, ~~rheumatoid arthritis, scleroderma, or multiple sclerosis~~.

96. (currently withdrawn) A method of treating a condition dependent on CD40 ligand-induced activation of epithelial cells in a subject, comprising the method of claim 38.

97. (currently withdrawn) The method of claim 96 wherein the epithelial cells are keratinocytes, and the condition is psoriasis.

98. (currently withdrawn) A method of inhibiting activation by CD40 ligand of myeloma cells bearing CD40 on the cell surface, comprising contacting the cells with an agent capable of inhibiting interaction between CD40 ligand and the cells, in an amount effective to inhibit activation of the cells.

99. (currently withdrawn) A method of inhibiting activation by CD40 ligand of myeloma cells bearing CD40 on the cell surface, in a subject, comprising administering to the subject an agent capable of inhibiting interaction between CD40 ligand and the cells, in an amount effective to inhibit activation of the cells in the subject.

100. (currently withdrawn) A method of treating a condition dependent on CD40 ligand-induced activation of myeloma cells in a subject, comprising the method of inhibiting activation by CD40 ligand of myeloma cells bearing CD40 on the cell surface of claim 99.

101. (currently withdrawn) The method of claim 100, wherein the condition is multiple myeloma.